



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
Laboratory Services and Applied Science Division
980 College Station Road
Athens, Georgia 30605-2720

May 17, 2023

MEMORANDUM

SUBJECT: PFAS Analytical Sampling Results
Sanford Cleaners
LSASD Project #: 23-0151

FROM: Paula A. Whiting, Environmental Engineer
Hazardous Waste Section
Field Services Branch

THRU: Kevin Simmons, Acting Supervisor
Hazardous Waste Section
Field Services Branch

TO: Erik Spalvins
Remedial Project Manager
Restoration and Sustainability Branch
Superfund and Emergency Management Division (SEMD)

Attached are the PFAS Analytical Sampling Results for Sanford Cleaners conducted on March 16, 2023, in Sanford, Florida. A total of 5 wells (1 background upgradient, 3 source, 1 downgradient) were sampled.

The Florida Department of Environmental Protection (FDEP) has calculated provisional GCTLs for PFOA and PFOS. The calculations were completed in accordance with Chapter 62-777, Florida Administrative Code (F.A.C.), equations and methodology. The provisional GCTLs for PFOA and PFOS concentrations are 70 nanograms per liter (ng/l), and 70 ng/l for the sum of PFOA and PFOS concentrations. The results revealed PFOA concentrations more than 70 ng/L at two locations (DEP2S and DEP4S).

SEMD requested that the results be referenced against the Regional Screening Levels (RSL) Tapwater (Drinking Water) May 2023 THQ=0.1 instead of the RSL Maximum Contaminant Level (MCL) May 2023 THQ=0.1 which is used to compare the natural environment instead of industrial and/or residential. The results revealed PFOA concentrations exceeded the 0.04 µg/L at two locations (DEP2S and DEP4S).

Additional information concerning the wells and the sampling are attached as: Sanford Cleaners Monitoring Well Information (**Table 1**), Sanford Cleaners Data Summary – PFAS (**Table 2**), Sanford Cleaners Well Locations map (**Figure 1**), the Sampling Calibration and Field Logbook (**Attachment 1**) which contain the monitoring well purge data and sampling notes, and the final PFAS Analytical Data Sheets (**Attachment 2**).

LSASD noted the following well conditions and recommendations needed to these wells based on field observations and logbook notes:

- Four wells were not measured for depth to water because the well casing diameters were too small for the water level probe.
- Due to the previous persulfate extraction treatment DEP3S, DEP4S and TW03S had very high turbidity and took up to 3 hours to purge to obtain a reading below or near 10 NTU.
- Well DEP3S purged dry within the first minute. LSASD allowed the well to recharge at 20-minute intervals before checking turbidity. When the turbidity dropped below 20 NTU, the water quality measurements were taken at 5-minute intervals at very low peristaltic pump speed. The final NTU was taken at 12.7 NTU. LSASD made the decision to sample because the continuous draw down of the well reset the readings to the initial pre-purge higher readings.
- The bottom of Well TW03S was cleaned out after the initial purge pumped out black silty material. This well historically has had high turbidity and LSASD increased water quality times from 5-minute to 20-minute intervals.
- The bottom of Well DEP4S was cleaned out after the initial purge pumped out black silty material. The well head was missing the 2-inch well cap which could be the potential reason for the silty material in the bottom of the well. The well cap needs to be replaced.

If you have any questions or comments, please contact me by phone at (706) 818-5926 or email at whiting.paula@epa.gov.

Attachments

cc: Scott Miller, SEMD
Derek Matory, SEMD
Sandra Aker, LSAD

LSASD Project ID: 23-0151

Sampling Investigation Final Report

Florida Dry Cleaners

Location: Sanford Cleaners
121 N. Palmetto Avenue
Sanford, Florida 32771

Project Dates: March 17, 2023

Report Date: May 17, 2023

Project Leader: Paula A Whiting
Hazardous Waste Section
Field Services Branch
Laboratory Services & Applied Science Division
USEPA – Region 4
980 College Station Road
Athens, Georgia 30605-2720

The ANSI National Accreditation Board attests that U.S. EPA Region 4 Laboratory Services and Applied Science Division fulfills the requirements of ISO/IEC 17025:2017 ANAB Forensic Testing & Calibration AR 3125:2019 in the field of Forensic Testing. The activities contained in this report fall within the scope of accreditation, Certificate Number: AT-2628. Expires 08 June 2024.



LSASD
LABORATORY SERVICES & APPLIED SCIENCE DIVISION

Project Requestor:

Erik Spalvins
Remedial Project Manager
Restoration and Sustainability Branch
Superfund and Emergency Management Division
US Environmental Protection Agency - Region 4
61 Forsyth Street SW
Atlanta, Georgia 30303
(404) 562-8938 office
(404) 909-0345 cellular phone
spalvins.erik@epa.gov

Analytical Support:

Laboratory Services Branch
Laboratory Services & Applied Science Division
US Environmental Protection Agency - Region 4
980 College Station Road
Athens, Georgia 30605

Approvals:

LSASD Project Leader:

Paula A Whiting
Hazardous Waste Section
Field Services Branch

Date

Approving Official:

Kevin Simmons, Acting Supervisor
Hazardous Waste Section
Field Services Branch

Date

This Sampling and Analysis Plan (SAP) is designed to be used in conjunction with the *Applied Science Branch Quality Assurance Project Plan* December 2019.

Table 1: Sanford Cleaners Monitoring Well Information

| Well | Latitude | Longitude | Total Depth (feet bgs) | Screen Interval (feet bgs) | Notes |
|------------|-----------|------------|---------------------------|----------------------------------|-------------------------------|
| DEP2S | 28.811089 | -81.265836 | 15 | 10-15 | Background upgradient well |
| DEP3S | 28.811132 | -81.265466 | 15 | 10-15 | Source well |
| TW03S | 28.811183 | -81.265465 | 20 | 5-20 | Source well |
| DEP4S | 28.811296 | -81.265471 | 15 | 10-15 | Source well |
| SDCMW22MA1 | 28.813501 | -81.264419 | 27 | 25-27 | Downgradient well |

Bgs below ground surface

Table 2: Sanford Cleaners Data Summary – PFAS

| Data Summary - PFAS SELECTED COMPARISON STANDARD: RSL Tapwater May 2023 THQ=0.1 FDEP Provisional Groundwater Cleanup Target Level (PGCTL) for PFOA and PFOS (sum of PFOA and PFOS should be compared to the PGCTL) = 70 ng/L | | | | | | | |
|--|--------------------|----------------------------|--------------------|--------------------|--------------------|-----------------|--------------------|
| | Station ID | - | DEP2S | DEP3S | DEP4S | SDCMW22MA1 | TW03S |
| - | Sample ID | - | DEP2S-0323 | DEP3S-0323 | DEP4S-0323 | SDCMW22MA1-0323 | TW03S-0323 |
| - | Matrix | - | Groundwater | Groundwater | Groundwater | Groundwater | Groundwater |
| - | Sample Date | - | 3/16/2023 13:40 | 3/16/2023 16:45 | 3/16/2023 17:35 | 3/16/2023 19:50 | 3/16/2023 18:10 |
| Analyte | Units | Comparison Standard | | | | | |
| N-EtFOSAA | ng/L | | < 9.9 U | < 10 U | < 9.9 U | < 10 U | 13 J,O |
| PFBA | ng/L | | 12 J,O | < 20 U | 25 | < 20 U | < 20 U |
| PFBS | ng/L | 6 µg/L | 11 J,O | < 8.8 U | 30 | < 8.9 U | < 8.8 U |
| PFHpA | ng/L | | 21 | 6.4 J,O | 19 | 4.7 J,O | < 10 U |
| PFHxA | ng/L | 9.9 µg/L | 18 J,O | 8.8 J,O | 22 J,O | < 20 U | < 20 U |
| PFHxS | ng/L | 0.39 µg/L | < 9.1 U | < 9.1 U | 7.1 J,O | < 9.1 U | < 9.1 U |
| PFNA | ng/L | 0.059 µg/L | 9.0 J,O | < 10 U | < 9.9 U | < 10 U | < 10 U |
| PFOA | ng/L | 0.06 µg/L | 30 | 8.1 J,O | 33 | 6.2 J,O | 5.7 J,O |
| PFOS | ng/L | 0.04 µg/L | 42 ^ | < 9.3 U | 43 J,O ^ | < 9.3 U | 23 |
| PFPeA | ng/L | | 18 | 17 | 33 | < 10 U | < 10 U |

DATA QUALIFIER DEFINITIONS

- O Other qualifiers have been assigned providing additional information. These explanatory qualifiers are included in the printable pdf report and in other columns in the export files.
- U The analyte was not detected at or above the reporting limit.
- J The identification of the analyte is acceptable; the reported value is an estimate.
- ^ Denotes exceedance of Comparison Standard

Figure 1

Sanford Cleaners Well Locations Map

**Figure 1
Sanford Dry Cleaners
Well Locations
March 2023**



Attachment 1

Sampling Calibration and Field Logbook

United States Environmental Protection Agency Region 4

Laboratory Services and Applied Science Division
980 College Station Road
Athens, Georgia 30605-2720



Florida Dry Cleaners

Continental Cleaners, Miami, FL
Flash Cleaners, Pompano Beach, FL
Sanford Cleaners, Sanford, FL

LSASD Project ID# 23-0149; 23-0150; 23-0151

Project Leader: Paula Whiting

Field Instrument Calibration Logbook

Book 1 of 1

Inclusive Dates: March 13⁻¹⁶, 2023

List of personnel:

| Name/Affiliation | Initials |
|---|------------|
| Paula Whiting | <u>PAW</u> |
| Don Fortson | |
| Daniel McCay <i>pmw</i> 2/13/23 | |
| | |

Date 3/13/23

Instruments

| Instrument Field # | LSASD ID # | pH | µS | °C | NTU | DO | ORP |
|--------------------|---------------------------------|----|----|----|-----|----|-----|
| 1 | 020314-04 | X | X | X | | | |
| 2 | 092718-02 ^{OK 3/13/23} | | | | X | | |
| 3 | 072816-03 | | | | | X | X |
| 4 | | X | X | X | | | |
| 5 | | | | | X | | |
| 6 | | | | | | X | X |
| 7 | | X | X | X | | | |
| 8 | | | | | X | | |
| 9 | | | | | | X | X |
| 10 | | X | X | X | | | |
| 11 | | | | | X | | |
| 12 | | | | | | X | X |

Calibration Standards

| Standard | Value | Manufacturer | Lot # | Expiration |
|--------------------------|---------|---------------------------------------|-----------|------------|
| pH | 4 | Fisher | 215478 | 7/23 |
| pH | 7 | Fisher | 254 | 8/23 |
| pH | 10 | Fisher | 220003 | 1/24 |
| Conductivity | 1413 µS | ^{OK 3/13/23} Orion Oatton | 2203E57 | 3/23 |
| Turbidity Standard Set # | 10 | HACH | A2095 | 7/23 |
| | 20 | HACH | A2109 | 7/23 |
| | 100 | HACH | A2101 | 7/23 |
| Turbidity Standard Set # | 10 | | | |
| | 20 | | | |
| | 100 | | | |
| NIST Thermometer | - | Traceable | 051721-04 | 3/1/24 |
| NIST Thermometer | - | | | |
| ORP - Zobell Solution | - | YSI | 22F100175 | 6/7/27 |
| ORP - Zobell Solution | - | | | |

Notes:

Stor Mor Buffer Set:

pH Manufacturer

4

7

10

Lot#

Expiration Date

092718-02 would not power on.

Calibration Date 3/13/23Time 10:40End Check Time 19:50

| Instrument # | Parameter | Standard Value | Pre-Cal Reading | Calibration/ Verification | Post-Cal Reading | End of Day Check | Initials |
|--------------|--------------|----------------|-----------------|---------------------------|------------------|------------------------------|----------|
| 1 | pH | 4 | 3.94 | 4.01 | 4.01 | 4.02 | DF |
| 1 | pH | 7 | 6.88 | 6.99 | 7.00 | 6.96 | DF |
| 1 | pH | 10 | 10.00 | Slope 98.3% | 10.03 | 10.00 | DF |
| 1 | Spec Cond | 1413 μ S | 1391 | 1413 μ S | 1410 | 1407 | DF |
| 1 | Temp | NIST: 28.0 °C | | Meter: 27.8 °C | | NIST: 33.5 °C Meter: 32.9 °C | DF |
| 2 | Turbidity | 0 | | 0.20 | | 0.12 | DF |
| 2 | Turbidity | 10 | | 9.65 | | 9.56 | DF |
| 2 | Turbidity | 20 | | 20.0 | | 19.7 | DF |
| 2 | Turbidity | 100 | | 99.1 | | 99.4 | DF |
| 3 | DO | 100 | 100.0 | 100 | 100.1 | 97.9 | DS |
| 3 | ORP@ 29.7 °C | 224.5 | 213.5 | 224.5 | 224.6 | ORP STD: 219.3 Meter: 218.0 | DF |
| 4 | pH | 4 | | | | | |
| 4 | pH | 7 | | | | | |
| 4 | pH | 10 | | | | | |
| 4 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 4 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 5 | Turbidity | 0 | | | | | |
| 5 | Turbidity | 10 | | | | | |
| 5 | Turbidity | 20 | | | | | |
| 5 | Turbidity | 100 | | | | | |
| 6 | DO | 100 | | 100 | | | |
| 6 | ORP@ °C | | | | | ORP STD: Meter: | |
| 7 | pH | 4 | | | | | |
| 7 | pH | 7 | | | | | |
| 7 | pH | 10 | | | | | |
| 7 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 7 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 8 | Turbidity | 0 | | | | | |
| 8 | Turbidity | 10 | | | | | |
| 8 | Turbidity | 20 | | | | | |
| 8 | Turbidity | 100 | | | | | |
| 9 | DO | 100 | | 100 | | | |
| 9 | ORP@ °C | | | | | ORP STD: Meter: | |

External
Temp
32.1 °C
@ 10.5
29.3 °C
19.4 °C

Calibration Date 3-14-23Time 0952End Check Time 16:56

| Instrument # | Parameter | Standard Value | Pre-Cal Reading | Calibration/ Verification | Post-Cal Reading | End of Day Check | Initials |
|--------------|--------------|----------------|-----------------|---------------------------|------------------|------------------------------|----------|
| 1 | pH | 4 | 3.97 | 4.01 | 4.02 | 3.95 | DF |
| 1 | pH | 7 | 6.96 | 7.00 | 7.01 | 6.89 | DF |
| 1 | pH | 10 | 10.04 | Slope 98.3% | 10.07 | 10.03 | DF |
| 1 | Spec Cond | 1413 μ S | 1417 | 1413 μ S | 1411 | 1412 | DF |
| 1 | Temp | NIST: 25.8 °C | | Meter: 25.6 °C | | NIST: 28.7 °C Meter: 28.5 °C | DF |
| 2 | Turbidity | 0 | | 0.10 | | 0.26 | DF |
| 2 | Turbidity | 10 | | 9.67 | | 9.61 | DF |
| 2 | Turbidity | 20 | | 20.1 | | 19.9 | DF |
| 2 | Turbidity | 100 | | 100 | | 99.6 | DF |
| 3 | DO | 100 | 98.5 | 100 | 100.1 | 100.6 | DF |
| 3 | ORP@ 24.7 °C | 231 | 234 | 231 | 230.7 | ORP STD: 228.4 Meter: 229.1 | DF |
| 4 | pH | 4 | | | | | |
| 4 | pH | 7 | | | | | |
| 4 | pH | 10 | | | | | |
| 4 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 4 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 5 | Turbidity | 0 | | | | | |
| 5 | Turbidity | 10 | | | | | |
| 5 | Turbidity | 20 | | | | | |
| 5 | Turbidity | 100 | | | | | |
| 6 | DO | 100 | | 100 | | | |
| 6 | ORP@ °C | | | | | ORP STD: Meter: | |
| 7 | pH | 4 | | | | | |
| 7 | pH | 7 | | | | | |
| 7 | pH | 10 | | | | | |
| 7 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 7 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 8 | Turbidity | 0 | | | | | |
| 8 | Turbidity | 10 | | | | | |
| 8 | Turbidity | 20 | | | | | |
| 8 | Turbidity | 100 | | | | | |
| 9 | DO | 100 | | 100 | | | |
| 9 | ORP@ °C | | | | | ORP STD: Meter: | |

Calibration Date 3-15-23Time 09:02End Check Time 16:47

| Instrument # | Parameter | Standard Value | Pre-Cal Reading | Calibration/ Verification | Post-Cal Reading | End of Day Check | Initials |
|--------------|-------------|----------------|-----------------|---------------------------|------------------|-----------------------------|----------|
| 1 | pH | 4 | 3.99 | 4.01 | 4.02 | 3.98 | LF |
| 1 | pH | 7 | 6.97 | 7.00 | 7.01 | 6.96 | LF |
| 1 | pH | 10 | 10.14 | Slope 98.6% | 10.13 | 10.09 | LF |
| 1 | Spec Cond | 1413 μ S | 1424 | 1413 μ S | 1417 | 1416 | LF |
| 1 | Temp | NIST: 23.5°C | | Meter: 23.3°C | | NIST: 25.8°C Meter: 25.5°C | LF |
| 2 | Turbidity | 0 | | 0.18 | | 0.13 | LF |
| 2 | Turbidity | 10 | | 9.62 | | 9.53 | LF |
| 2 | Turbidity | 20 | | 20.1 | | 20.1 | LF |
| 2 | Turbidity | 100 | | 99.2 | | 99.7 | LF |
| 3 | DO | 100 | 99.2 | 100 | 100.3 | 100.2 | LF |
| 3 | ORP@ 24.3°C | 232.3 | 235.3 | 232.3 | 232.1 | ORP STD: 232.3 Meter: 226.4 | LF |
| 4 | pH | 4 | | | | | |
| 4 | pH | 7 | | | | | |
| 4 | pH | 10 | | | | | |
| 4 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 4 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 5 | Turbidity | 0 | | | | | |
| 5 | Turbidity | 10 | | | | | |
| 5 | Turbidity | 20 | | | | | |
| 5 | Turbidity | 100 | | | | | |
| 6 | DO | 100 | | 100 | | | |
| 6 | ORP@ °C | | | | | ORP STD: Meter: | |
| 7 | pH | 4 | | | | | |
| 7 | pH | 7 | | | | | |
| 7 | pH | 10 | | | | | |
| 7 | Spec Cond | 1413 μ S | | 1413 μ S | | | |
| 7 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 8 | Turbidity | 0 | | | | | |
| 8 | Turbidity | 10 | | | | | |
| 8 | Turbidity | 20 | | | | | |
| 8 | Turbidity | 100 | | | | | |
| 9 | DO | 100 | | 100 | | | |
| 9 | ORP@ °C | | | | | ORP STD: Meter: | |

Tamb
@ 1902
23.5°CTamb
@ 16:47
20.7

Calibration Date 3-16-23Time 12:31End Check Time 3-17-23 17:02 -DLN

| Instrument # | Parameter | Standard Value | Pre-Cal Reading | Calibration/ Verification | Post-Cal Reading | End of Day Check | Initials |
|--------------|--------------|----------------|-----------------|---------------------------|------------------|------------------------------|----------|
| 1 | pH | 4 | 4.02 | 4.02 | 4.00 | 4.03 | DLN |
| 1 | pH | 7 | 6.98 | 6.98 | 6.98 | 7.01 | DLN |
| 1 | pH | 10 | 10.04 | Slope 98.8% | 10.03 | 10.15 | DLN |
| 1 | Spec Cond | 1413 µS | 1423 | 1413 µS | 1403 | 1425 | DLN |
| 1 | Temp | NIST: 29.7 °C | | Meter: 29.6 °C | | NIST: 22.5 °C Meter: 22.1 °C | DLN |
| 2 | Turbidity | 0 | | 0.17 | | 0.27 | DLN |
| 2 | Turbidity | 10 | | 9.50 | | 9.41 | DLN |
| 2 | Turbidity | 20 | | 19.8 | | 19.6 | DLN |
| 2 | Turbidity | 100 | | 99.8 | | 99.1 | DLN |
| 3 | DO | 100 | 99.7 | 100 | 100.3 | 97.3 | DLN |
| 3 | ORP@ 31.3 °C | 223.2 | 208.2 | 223.2 | | ORP STD: 233.6 Meter: 247.2 | DLN |
| 4 | pH | 4 | | | | | |
| 4 | pH | 7 | | | | | |
| 4 | pH | 10 | | | | | |
| 4 | Spec Cond | 1413 µS | | 1413 µS | | | |
| 4 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 5 | Turbidity | 0 | | | | | |
| 5 | Turbidity | 10 | | | | | |
| 5 | Turbidity | 20 | | | | | |
| 5 | Turbidity | 100 | | | | | |
| 6 | DO | 100 | | 100 | | | |
| 6 | ORP@ °C | | | | | ORP STD: Meter: | |
| 7 | pH | 4 | | | | | |
| 7 | pH | 7 | | | | | |
| 7 | pH | 10 | | | | | |
| 7 | Spec Cond | 1413 µS | | 1413 µS | | | |
| 7 | Temp | NIST: °C | | Meter: °C | | NIST: °C Meter: °C | |
| 8 | Turbidity | 0 | | | | | |
| 8 | Turbidity | 10 | | | | | |
| 8 | Turbidity | 20 | | | | | |
| 8 | Turbidity | 100 | | | | | |
| 9 | DO | 100 | | 100 | | | |
| 9 | ORP@ °C | | | | | ORP STD: Meter: | |

Notes:

3/13/23

Turbidimeter SC

did not turn on. Changed the batteries and
the unit still did not turn. Placed red tag on
case handle

PAW

End of

Logbook

3/17/23

United States Environmental Protection Agency Region 4

Laboratory Services and Applied Science Division
Hazardous Waste Section
980 College Station Road
Athens, Georgia 30605-2720



Project Name: Sanford Cleaners
Project Location: Sanford, Florida
Project ID Number: 23-0151
Project Leader: Paula Whiting

Field Measurement and Groundwater Sampling Logbook

Book 1 of 1

Inclusive Dates: March 16 - 16, 2023

List of personnel in logbook:

| Name | Initials | Organization/Duties |
|--------------------------------|-------------------|---|
| <u>Paula Whiting</u> | <u>PW</u> | <u>Project Leader, Scribe, Sampler, Logbook</u> |
| <u>Daniel McCay</u> | <u>PW 3/16/23</u> | <u>Safety Officer, Instruments, Sampler</u> |
| <u>Don Fortson</u> | <u>DF</u> | |
| | | |

The following field procedures will be used unless otherwise stated in the field logbooks:

SESDPROC-011-R5, Field Sampling Quality Control
SESDPROC-100-R5, Field pH Measurement
SESDPROC-101-R7, Field Specific Conductance Measurement
SESDPROC-102-R5, Field Temperature Measurement
SESDPROC-103-R4, Field Turbidity Measurement
SESDPROC-105-R4, Groundwater Level and Well Depth Measurement
SESDPROC-106-R4, Field Dissolved Oxygen Measurement
SESDPROC-113-R2, Oxidation-Reduction Potential Measurement
SESDPROC-202-R4, Management of Investigation Derived Waste
SESDPROC-205-R4, Field Equipment Cleaning and Decontamination
SESDPROC-209-R4, Packing, Marking, Labeling & Shipping of Environmental & Waste Samples
SESDPROC-301-R4, Groundwater Sampling

Notes:

- Groundwater samples were not filtered.
- Groundwater samples were collected using the "tubing-in-screened-interval" method as described in SESDPROC-301-R4, Section 3.5 unless otherwise noted in this logbook.

Existing tubing used if present and in good condition, otherwise new tubing will be used.

- **GPS coordinates and analyses are listed in Table 1, see page 4**
- **Well construction information is listed in Table 1, see page 4.**
- **Site map is Figure 1, see page 5.**
- **Sample ID is Station ID plus "-0323".**

Instrument calibration information is recorded in a separate instrument calibration logbook. Record instrument # (e.g. 1, 2, 3...) from the calibration logbook below:

| <u>Dates Used</u> | <u>Conductivity/pH</u> | <u>DO/ORP</u> | <u>Turbidity</u> |
|-------------------|------------------------|---------------|------------------|
| 3/16/23 | 1 | 2 | 3 |
| | | | |
| | | | |
| | | | |
| | | | |

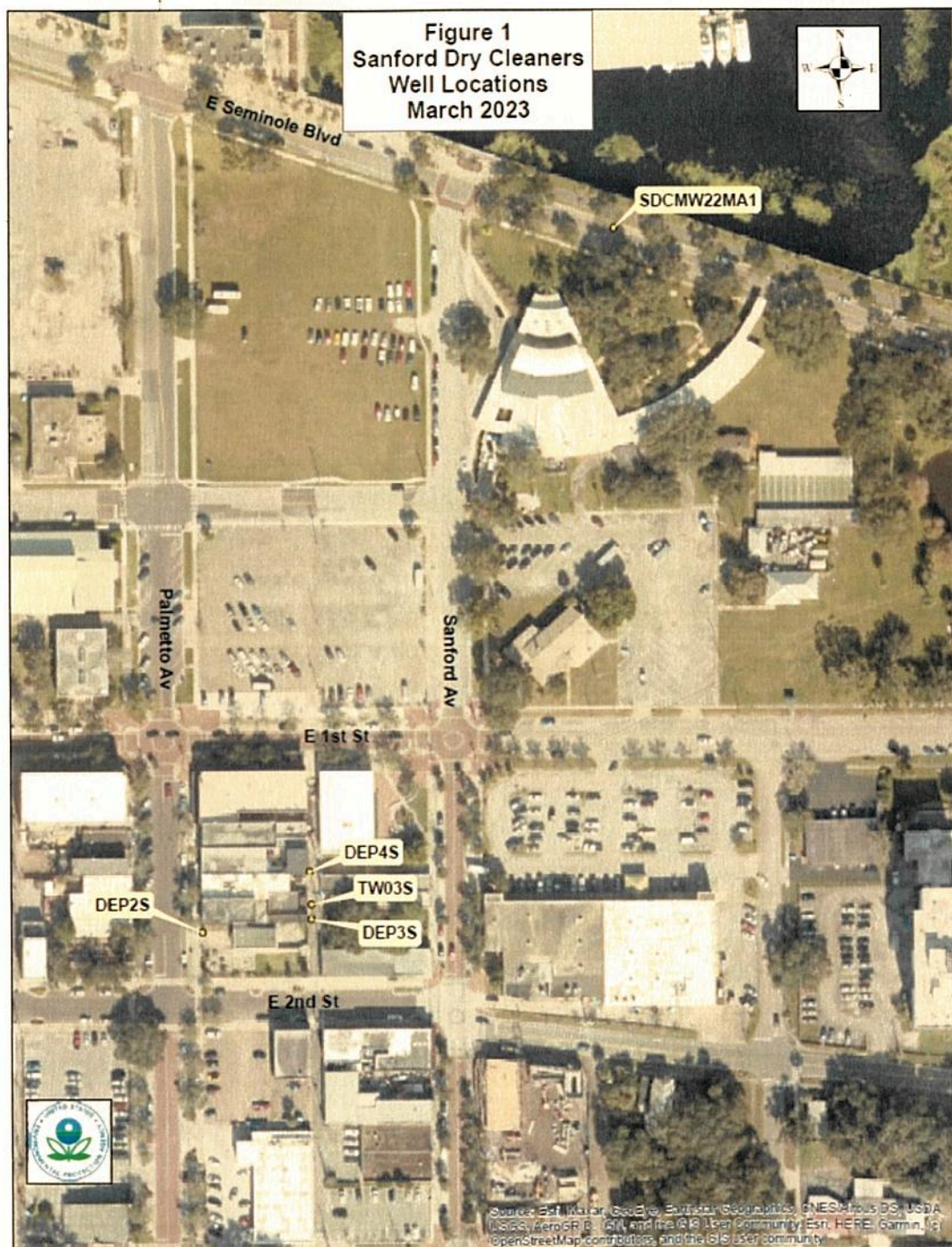
Notes:

Table 1 – Monitoring Well Information

| Station ID | Latitude | Longitude | Well Depth (ft) | Screen Length (ft) | Screen Interval (ft bgs) | Well Diameter (in) | Analyses |
|------------|-----------|------------|-----------------|--------------------|--------------------------|--------------------|----------|
| DEP2S | 28.811089 | -81.265836 | 15 | 10-15 | 5 | 0.75 | PFAS |
| DEP3S | 28.811132 | -81.265466 | 15 | 10-15 | 5 | 0.75 | PFAS |
| TW03S | 28.811183 | -81.265465 | 20 | 5-20 | 15 | 2 | PFAS |
| DEP4S | 28.811296 | -81.265471 | 15 | 10-15 | 5 | 0.75 | PFAS |
| SDCMW22MA1 | 28.813501 | -81.264419 | 27 | 25-27 | 2 | 0.375 | PFAS |

ft bgs - Feet Below Ground Surface

Figure 1: Monitoring Well Locations



Notes:

3/16/23

See page 99 of Sampling report

allowed DEP 25 to sit and recharge @ 20 minute intervals before checking turbidity. When turbidity dropped below 20 NTU reconnected the meters for 5 minute readings. - Low speed

Final NTU @ 12.7 - 1640 PM decided to sample because continuous running of pump draws down water and resets all the readings to initial readings.

Date: 3/16/23 Station ID: DEP2S Sample ID: DEP2S-0323

Team Members

D. Fortson
P. Whiting

Duties

Sampler, Instrument
Sampler, Logbook

Well Diameter (in) 3/4 Well screen length (ft) 5
Well Depth (ft) 14.72 Tubing intake (ft above bottom) 2.5
Water Level (ft) 4.0 Total well volume = 0.1632 gal/ft * Water Column _____
Water Column (ft) 10.72 Purge Volume (gal) _____

Purge Start Time 1305

| Time | Depth to Water | Cumulative Volume | pH (S.U.) | Temp (°C) | Spec Cond (µS/cm) | DO (mg/L) | ORP (mV) | NTU |
|------|----------------|-------------------|-----------|-----------|-------------------|-----------|----------|------|
| 1310 | — | 0.6 | 6.55 | 26.7 | 305 | 0.18 | -80 | 485 |
| 1315 | — | 1.2 | 6.58 | 26.6 | 359.1 | 0.18 | -90 | 217 |
| 1320 | — | 1.8 | 6.59 | 26.6 | 388.5 | 0.17 | -100 | 108 |
| 1326 | — | 2.5 | 6.59 | 26.5 | 413.6 | 0.05 | -100 | 45.3 |
| 1330 | — | 3.0 | 6.58 | 26.5 | 415.3 | 0.13 | -100 | 27.1 |
| 1335 | — | 3.5 | 6.59 | 26.5 | 424.4 | 0.12 | -100 | 6.34 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Sample Collection Time

1340

MS/MSD?

||

| Analyses | Container Type | Collected | Preservation | Samples Iced? |
|----------|----------------|-------------------------------------|--------------|-------------------------------------|
| PFAS | 15 ml vial-2 | <input checked="" type="checkbox"/> | Ice + HCl | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> | Ice + HCl | <input type="checkbox"/> |

If Duplicate Sample:

Sample ID _____

Date/Time _____

☐ All samples placed on ice/cooler checked for ice/water

Environmental conditions:

Sunny, warm, breeze
clear skies - in front of La Viva Dolce

TB: 04203 04187
04217

Sample media description (odor, color, etc.):

Clear liquid, light brown silty material causing turbidity cloudy

Procedure deviations/Comments/Notes:

low flow sampling w/ peristaltic
because well dia 3/4" not able to fit sounder sensor
and tubing together in well

Date: 3/16/23 Station ID: DEP3S Sample ID: DEP3S-0323

Team Members

D. Fortson
P. Whiting

Duties

Sampler, Instrument
Sampler, Logbook

Well Diameter (in) 3/4
Well Depth (ft) 14.5
Water Level (ft) 5.59
Water Column (ft) 8.91

Well screen length (ft) 5
Tubing intake (ft above bottom) 2.5
Total well volume = 0.1632 gal/ft * Water Column 1
Purge Volume (gal) 1

Purge Start Time 1415

| Time | Depth to Water | Cumulative Volume | pH (S.U.) | Temp (°C) | Spec Cond (µS/cm) | DO (mg/L) | ORP (mV) | NTU |
|------|----------------|-------------------|----------------------|-----------|-------------------|-----------|----------|------|
| 1445 | — | 0.8 | 4.86 | 24.6 | 2522 | 1.36 | 38.6 | 462 |
| 1450 | — | 1.0 | 4.90 | 24.7 | 2471 | 1.24 | 30.6 | 444 |
| 1457 | — | 1.2 | 4.97 | 24.6 | 2433 | 4.32 | 15.4 | 124 |
| 1520 | — | 1.3 | 2.81 ^{4.80} | 24.2 | 2997 | 4.80 | 39 - 2 | 153 |
| 1610 | — | 1.8 | 4.96 | 24.3 | 1890 | 0.67 | -30 | 18.9 |
| 1615 | — | 2.0 | 4.88 | 24.5 | 2195 | 1.54 | -30 | 84.5 |
| 1640 | — | — | — | — | — | — | — | 12.7 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

turned pump off
- at 1545
22.6
@ 1605
11.8

Sample Collection Time 1645 MS/MSD?

| Analyses | Container Type | Collected | Preservation | Samples Iced? |
|----------|----------------|-------------------------------------|--------------|-------------------------------------|
| PFAS | 15 ml vial - 2 | <input checked="" type="checkbox"/> | Ice + HCl | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> | Ice + HCl | <input type="checkbox"/> |

If Duplicate Sample:

Sample ID 04215
04216

Date / Time

well has persulfate added for

☐ All samples placed on ice/cooler checked for ice/water treatment - removing persulfate extraction for advanced bioremediation

Environmental conditions:

Sunny, warm, light breeze
Clear skies

Sample media description (odor, color, etc.):

turbid, milky brown color, liquid, chemical sulfur odor
sheen in water

Procedure deviations/Comments/Notes:

low flow sampling w/ peristaltic

- purged well dry within 1st minute

because well dia 3/4" not able to fit sounder sensor and tubing together in well

Date: 3/16/23 Station ID: TW03S Sample ID: TW03S-0323

Team Members

D. Fortson
P. Whiting

Duties

Sampler, Instruments
Sampler, Logbook

Well Diameter (in) 2
Well Depth (ft) 19.91
Water Level (ft) 5.38
Water Column (ft) 14.53

Well screen length (ft) 15 PAN 3/16/23
Tubing intake (ft above bottom) 7.55
Total well volume = 0.1632 gal/ft * Water Column
Purge Volume (gal)

Purge Start Time 1518

filled out
clean out
bottom

stopped
and cleaned
it bottom

| Time | Depth to Water | Cumulative Volume | pH (S.U.) | Temp (°C) | Spec Cond (µS/cm) | DO (mg/L) | ORP (mV) | NTU |
|------------------------|----------------|-------------------|-----------|-----------|-------------------|-----------|----------|------|
| 1527 | 5.84 | 0.9 | 5.67 | 24.8 | 1109 | 0.35 | -30 | HHHH |
| 1550 | 6.37 | 3.5 | 5.63 | 24.7 | 1156 | 0.09 | -70 | 428 |
| 1555 | 6.33 | 3.9 | 5.64 | 24.8 | 1154 | 0.06 | -70 | 136 |
| 1600 | 6.29 | 4.3 | 5.66 | 24.6 | 1132 | 0.07 | -80 | 144 |
| 1605 | 6.29 | 4.8 | 5.65 | 24.6 | 1139 | 0.08 | -80 | 147 |
| 1625 | 6.14 | 7.1 | 5.62 | 24.6 | 1154 | 0.16 | -80 | 361 |
| 1635 <small>pm</small> | 6.00 | 7.8 | 5.63 | 24.6 | 1153 | 0.06 | -100 | 174 |
| 1655 | 5.84 | 9.1 | 5.65 | 24.6 | 1149 | 0.12 | -105 | 73.2 |
| 1715 | 5.85 | 10.1 | 5.64 | 24.5 | 1145 | 0.08 | -110 | 44.2 |
| 1750 | 5.85 | 12.2 | 5.63 | 24.5 | 1140 | 0.04 | -110 | 25.1 |

Sample Collection Time

1810

MS/MSD?

11

1807 5.82 13.3 5.63 24.4 1136 0.08 -110 18.5

| Analyses | Container Type | Collected | Preservation | Samples Iced? |
|----------|----------------|-------------------------------------|--------------|-------------------------------------|
| PFAS | 15 ml vial - 2 | <input checked="" type="checkbox"/> | Ice + HCl | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> | Ice + HCl | <input type="checkbox"/> |

If Duplicate Sample:

Sample ID

04268
04213

Date/Time

[☒] All samples placed on ice/cooler checked for ice/water

Environmental conditions:

Sunny, warm, light breeze, clear skies

Sample media description (odor, color, etc.):

liquid w/ silty black fines, chemical sulfur odor

Procedure deviations/Comments/Notes:

Cleaned out well bottom which was filled w/ black silty material. High turbidity so reduced readings from 5min to 10min to 20min.
Well has history of high turbidity

Date: 3/16/23 Station ID: DEP4S 3/16/23 Sample ID: DEP4S-0323

Team Members

D. Fortson
P. Whiting

Duties

Sampler, Instruments
Sampler, Logbook

Well Diameter (in) 3/4
Well Depth (ft) 14.76
Water Level (ft) 4.73
Water Column (ft) 10.03

Well screen length (ft) 5
Tubing intake (ft above bottom) 2.5
Total well volume = 0.1632 gal/ft * Water Column
Purge Volume (gal)

Purge Start Time 1705

| Time | Depth to Water | Cumulative Volume | pH (S.U.) | Temp (°C) | Spec Cond (µS/cm) | DO (mg/L) | ORP (mV) | NTU |
|------|----------------|-------------------|-----------|-----------|-------------------|-----------|----------|------|
| 1720 | — | 1.6 | 6.56 | 23.8 | 373.4 | 0.71 | -60 | 18.3 |
| 1725 | — | 2.1 | 6.57 | 24.4 | 365.4 | 0.08 | -90 | 10.4 |
| 1730 | — | 2.5 | 6.57 | 24.5 | 361.6 | 0.13 | -90 | 6.11 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Sample Collection Time

1735

MS/MSD?

1 1

04209
04214

| Analyses | Container Type | Collected | Preservation | Samples Iced? |
|----------|----------------|-------------------------------------|--------------|-------------------------------------|
| PFAS | 15 ml vial - 2 | <input checked="" type="checkbox"/> | Ice + HCl | <input checked="" type="checkbox"/> |
| | | <input type="checkbox"/> | Ice + HCl | <input type="checkbox"/> |

If Duplicate Sample:

Sample ID

Date / Time

☒ All samples placed on ice/cooler checked for ice/water

Environmental conditions:

Sunny, clear, warm - located on 2nd Street (back alley)
light breeze

Sample media description (odor, color, etc.):

let well purge for 15 min after clean out.
liquid w/ brown sediment, turbid and very cloudy, slight odor

Procedure deviations/Comments/Notes:

low flow w/ peristaltic pump, because well dia 3/4" not able to fit
well head was missing 2" well cap - potential reason in well
for silt material in bottom of well

Date: 3/16/23 Station ID: SDCMW22MA1 Sample ID: SDCMW22MA1-0323

Team Members

D. Fortson
P. Whiting

Duties

Sampler, Instruments
Sampler, Logbook

Well Diameter (in) 0.375
Well Depth (ft) 27
Water Level (ft) NA
Water Column (ft) NA

Well screen length (ft) 2
Tubing intake (ft above bottom) 1
Total well volume = 0.1632 gal/ft * Water Column
Purge Volume (gal)

Purge Start Time 1920

| Time | Depth to Water | Cumulative Volume | pH (S.U.) | Temp (°C) | Spec Cond (µS/cm) | DO (mg/L) | ORP (mV) | NTU |
|------|----------------|-------------------|-----------|-----------|-------------------|-----------|----------|------|
| 1925 | — | 0.5 | 7.03 | 24.9 | 1116 | 0.39 | -180 | 1.04 |
| 1930 | — | 1.0 | 7.04 | 24.9 | 1141 | 0.31 | -220 | 0.93 |
| 1935 | — | 1.5 | 7.03 | 24.9 | 1146 | 0.14 | -240 | 0.44 |
| 1940 | — | 2.0 | 7.03 | 24.9 | 1155 | 0.08 | -240 | 1.30 |
| 1945 | — | 2.5 | 7.03 | 25.0 | 1157 | 0.15 | -240 | 1.51 |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Sample Collection Time

1950

MS/MSD?

VI

from 3/16/23

| Analyses | Container Type | Collected | Preservation | Samples Iced? |
|----------|----------------------|-----------|--------------|---------------|
| PFAS | 15 ml vial <u>24</u> | <u>14</u> | Ice + HCl | <u>14</u> |
| | | | Ice + HCl | |

If Duplicate Sample:

Sample ID

Date / Time

☐ All samples placed on ice/cooler checked for ice/water

Environmental conditions:

Evening, windy, cool

Sample media description (odor, color, etc.):

clear, yellowish liquid, no odor

Procedure deviations/Comments/Notes:

low flow sampling w/ peristaltic pump
Not able to use well sounder because of narrow
3-way channels grouped into pipe preventing insert of sounder.

04206
04211
04212
04207

Duties

Well screen length (ft)

Tubing intake (ft above bottom)

Total well volume = 0.1632 gal/ft * Water Column

Purge Volume (gal)

Purge Start Time

3/16/23

MS/MSD?

If Duplicate Sample:

Sample ID

Date / Time

[] All samples placed on ice/cooler checked for ice/water

Sample media description (odor, color, etc.):

Procedure deviations/Comments/Notes:

Attachment 2

PFAS Analytical Data Sheets



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

April 18, 2023

MEMORANDUM

SUBJECT: FINAL Analytical Report
Project: 23-0151, Sanford Cleaners

FROM: Floyd Wellborn
LSB Technical Advisor

THRU: Stacie Masters, Chief
Laboratory Services Branch

TO: Paula Whiting

Attached are the final results for the analytical groups listed below. This report shall not be reproduced except in full without approval of the Region 4 laboratory. These analyses were performed in accordance with the Laboratory Services Branch's Laboratory Operations and Quality Assurance Manual (LSB LOQAM) found at www.epa.gov/region4/sesd/asbsop. Any unique project data quality objectives specified in writing by the data requestor have also been incorporated into the data unless otherwise noted in the Report Narrative. Chemistry data have been verified based on the LSB LOQAM specifications and have been qualified by this laboratory if the applicable quality control criteria were not met. Verification is defined in Chapter 5 of the LSB LOQAM. For a listing of specific data qualifiers and explanations, please refer to the Data Qualifier Definitions included in this report. The reported results are accurate within the limits of the method(s) and are representative only of the samples as received by the laboratory.

Analyses Included in this report:

Method Used:

Accreditations:

Semi Volatile Organics (SVOA)

PFAS

ASTM D7979-19 (Water)

ISO



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Sample Disposal Policy

Due to limited space for long term sample storage, LSB's policy is to dispose of samples on a periodic schedule. Air samples collected in summa canisters will be disposed of 30 days following the issuance of this report. All other sample media including original samples, sample extracts and or digestates will be disposed of, in accordance with applicable regulations, 60 days from the date of this report.

This sample disposal policy does not apply to criminal samples which are held until the laboratory is notified by the criminal investigators that case development and litigation are complete.

These samples may be held in the laboratory's custody for a longer period of time. If samples require storage beyond the 60-day period, please contact the Sample Control Coordinator by e-mail at R4SampleCustody@epa.gov.

cc: Nardina Turner



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

SAMPLES INCLUDED IN THIS REPORT

Project: 23-0151, Sanford Cleaners

| Sample ID | Laboratory ID | Matrix | Date Collected | Date Received |
|-----------------|---------------|--------------------|----------------|---------------|
| TB010323 | E231201-01 | Trip Blank - Water | 3/16/23 18:10 | 3/20/23 8:30 |
| DEP2S-0323 | E231201-02 | Groundwater | 3/16/23 13:40 | 3/20/23 8:30 |
| DEP3S-0323 | E231201-03 | Groundwater | 3/16/23 16:45 | 3/20/23 8:30 |
| DEP4S-0323 | E231201-04 | Groundwater | 3/16/23 17:35 | 3/20/23 8:30 |
| SDCMW22MA1-0323 | E231201-05 | Groundwater | 3/16/23 19:50 | 3/20/23 8:30 |
| TW03S-0323 | E231201-06 | Groundwater | 3/16/23 18:10 | 3/20/23 8:30 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

DATA QUALIFIER DEFINITIONS

| | |
|------|---|
| U | The analyte was not detected at or above the reporting limit. |
| J | The identification of the analyte is acceptable; the reported value is an estimate. |
| Q-2 | Result greater than MDL but less than MRL. |
| QC-7 | The relative intensities and/or ratios of the characteristic ions do not agree with the relative intensities/ratios of the ions in the reference spectrum |

ACRONYMS AND ABBREVIATIONS

| | |
|-----|---|
| CAS | Chemical Abstracts Service Note: Analytes with no known CAS identifiers have been assigned codes beginning with "E", the EPA ID as assigned by the EPA Substance Registry System (www.epa.gov/srs), or beginning with "R4-", a unique identifier assigned by the EPA Region 4 laboratory. |
| MDL | Method Detection Limit - The minimum concentration of a substance (an analyte) that can be measured and reported with a 99% confidence that the analyte concentration is greater than zero. |
| MRL | Minimum Reporting Limit - Analyte concentration that corresponds to the lowest demonstrated level of acceptable quantitation. The MRL is sample-specific and accounts for preparation weights and volumes, dilutions, and moisture content of soil/sediments. |
| TIC | Tentatively Identified Compound - An analyte identified based on a match with the instrument software's mass spectral library. A calibration standard has not been analyzed to confirm the compound's identification or the estimated concentration reported. |

ACCREDITATIONS:

| | |
|--------|--|
| ISO | Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Laboratories. Refer to the certificate and scope of accreditation FT-0330 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd |
| NR | Not accredited for this test. |
| DW | Accredited for conformance with ISO/IEC 17025:2017 and testing elements in the Fifth Edition of the Manual for the Certification of Laboratories Analyzing Drinking Water, EPA 815-R-05-004, 2005. Refer to the certificate and scope of accreditation AT-2628 at: http://www.epa.gov/aboutepa/about-region-4s-science-and-ecosystem-support-division-sesd |
| ISO/DW | Accredited to ISO/IEC 17025:2017 and accreditation requirements for Forensic Science Testing Labs, and conformance with ISO/IEC 17025:2017 and testing elements in the Manual for the Certification of Laboratories Analyzing Drinking Water. |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: TB010323

Lab ID: E231201-01

Station ID:

Matrix: Trip Blank - Water

Date Collected: 3/16/23 18:10

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.4 | U | ng/L | 9.4 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.5 | U | ng/L | 9.5 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.6 | U | ng/L | 9.6 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 754-91-6 | FOSA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 375-22-4 | PFBA | 20 | U | ng/L | 20 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 375-73-5 | PFBS | 8.9 | U | ng/L | 8.9 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 335-76-2 | PFDA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.7 | U | ng/L | 9.7 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 20 | U | ng/L | 20 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 9.1 | U | ng/L | 9.1 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 375-95-1 | PFNA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.6 | U | ng/L | 9.6 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 335-67-1 | PFOA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 9.3 | U | ng/L | 9.3 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.4 | U | ng/L | 9.4 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 10 | U | ng/L | 10 | 3/28/23 14:53 | 4/06/23 16:43 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: DEP2S-0323

Lab ID: E231201-02

Station ID: DEP2S

Matrix: Groundwater

Date Collected: 3/16/23 13:40

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|--------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 754-91-6 | FOSA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 375-22-4 | PFBA | 12 | J, Q-2 | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 375-73-5 | PFBS | 11 | J, QC-7 | ng/L | 8.8 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 335-76-2 | PFDA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 21 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 18 | J, Q-2, QC-7 | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 9.1 | U | ng/L | 9.1 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 375-95-1 | PFNA | 9.0 | J, Q-2 | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 335-67-1 | PFOA | 30 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 42 | | ng/L | 9.2 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 18 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:02 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: DEP3S-0323

Lab ID: E231201-03

Station ID: DEP3S

Matrix: Groundwater

Date Collected: 3/16/23 16:45

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|--------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 754-91-6 | FOSA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 375-22-4 | PFBA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 375-73-5 | PFBS | 8.8 | U | ng/L | 8.8 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 335-76-2 | PFDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 6.4 | J, Q-2, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 8.8 | J, Q-2, QC-7 | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 9.1 | U | ng/L | 9.1 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 375-95-1 | PFNA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 335-67-1 | PFOA | 8.1 | J, Q-2, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 17 | | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:21 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: DEP4S-0323

Lab ID: E231201-04

Station ID: DEP4S

Matrix: Groundwater

Date Collected: 3/16/23 17:35

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 754-91-6 | FOSA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 375-22-4 | PFBA | 25 | | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 375-73-5 | PFBS | 30 | | ng/L | 8.8 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 335-76-2 | PFDA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 19 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 22 | J, QC-7 | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 7.1 | J, Q-2 | ng/L | 9.0 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 375-95-1 | PFNA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 335-67-1 | PFOA | 33 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 43 | J, QC-7 | ng/L | 9.2 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 33 | | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 9.9 | U | ng/L | 9.9 | 4/05/23 15:18 | 4/06/23 17:39 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: SDCMW22MA1-0323

Lab ID: E231201-05

Station ID: SDCMW22MA1

Matrix: Groundwater

Date Collected: 3/16/23 19:50

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|--------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 754-91-6 | FOSA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 375-22-4 | PFBA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 375-73-5 | PFBS | 8.9 | U | ng/L | 8.9 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 335-76-2 | PFDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.7 | U | ng/L | 9.7 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 4.7 | J, Q-2, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 9.1 | U | ng/L | 9.1 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 375-95-1 | PFNA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 335-67-1 | PFOA | 6.2 | J, Q-2, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 9.3 | U | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 17:58 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics

Project: 23-0151, Sanford Cleaners

Sample ID: TW03S-0323

Lab ID: E231201-06

Station ID: TW03S

Matrix: Groundwater

Date Collected: 3/16/23 18:10

| CAS Number | Analyte | Results | Qualifiers | Units | MRL | Prepared | Analyzed | Method |
|-------------|-----------|---------|--------------|-------|-----|---------------|---------------|---------------|
| 757124-72-4 | 4:2FTS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 27619-97-2 | 6:2FTS | 9.5 | U | ng/L | 9.5 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 39108-34-4 | 8:2FTS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 754-91-6 | FOSA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 13252-13-6 | HFPO-DA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 2991-50-6 | N-EtFOSAA | 13 | J, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 2355-31-9 | N-MeFOSAA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 375-22-4 | PFBA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 375-73-5 | PFBS | 8.8 | U | ng/L | 8.8 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 335-76-2 | PFDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 307-55-1 | PFDaA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 335-77-3 | PFDS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 375-85-9 | PFHpA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 375-92-8 | PFHpS | 19 | U | ng/L | 19 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 307-24-4 | PFHxA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 355-46-4 | PFHxS | 9.1 | U | ng/L | 9.1 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 375-95-1 | PFNA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 68259-12-1 | PFNS | 9.6 | U | ng/L | 9.6 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 335-67-1 | PFOA | 5.7 | J, Q-2, QC-7 | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 1763-23-1 | PFOS | 23 | | ng/L | 9.3 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 2706-90-3 | PFPeA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 2706-91-4 | PFPeS | 9.4 | U | ng/L | 9.4 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 376-06-7 | PFTeDA | 20 | U | ng/L | 20 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 72629-94-8 | PFTTrDA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |
| 2058-94-8 | PFUdA | 10 | U | ng/L | 10 | 4/05/23 15:18 | 4/06/23 18:17 | ASTM D7979-19 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics (SVOA) - Quality Control

US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch 2304003 - S PFC

Blank (2304003-BLK1)

Prepared: 04/05/23 Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | | | | |
|-----------|---|-----|------|--|--|--|--|--|--|---|
| 4:2FTS | U | 9.4 | ng/L | | | | | | | U |
| 6:2FTS | U | 9.5 | " | | | | | | | U |
| 8:2FTS | U | 9.6 | " | | | | | | | U |
| FOSA | U | 10 | " | | | | | | | U |
| HFPO-DA | U | 20 | " | | | | | | | U |
| N-EtFOSAA | U | 10 | " | | | | | | | U |
| N-MeFOSAA | U | 10 | " | | | | | | | U |
| PFBA | U | 20 | " | | | | | | | U |
| PFBS | U | 8.8 | " | | | | | | | U |
| PFDA | U | 10 | " | | | | | | | U |
| PFDoA | U | 10 | " | | | | | | | U |
| PFDS | U | 9.6 | " | | | | | | | U |
| PFHpA | U | 10 | " | | | | | | | U |
| PFHpS | U | 19 | " | | | | | | | U |
| PFHxA | U | 20 | " | | | | | | | U |
| PFHxS | U | 9.1 | " | | | | | | | U |
| PFNA | U | 10 | " | | | | | | | U |
| PFNS | U | 9.6 | " | | | | | | | U |
| PFOA | U | 10 | " | | | | | | | U |
| PFOS | U | 9.3 | " | | | | | | | U |
| PFPeA | U | 10 | " | | | | | | | U |
| PFPeS | U | 9.4 | " | | | | | | | U |
| PFTeDA | U | 20 | " | | | | | | | U |
| PFTTrDA | U | 10 | " | | | | | | | U |
| PFUdA | U | 10 | " | | | | | | | U |

LCS (2304003-BS1)

Prepared: 04/05/23 Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | |
|-----------|-----|-----|------|--------|------|------------|------|
| 4:2FTS | 469 | 9.4 | ng/L | 374.00 | 125 | 67.1-125 | |
| 6:2FTS | 447 | 9.5 | " | 380.00 | 118 | 49.2-134 | |
| 8:2FTS | 561 | 9.6 | " | 384.00 | 146 | 56.4-136 | QL-2 |
| FOSA | 391 | 10 | " | 400.00 | 97.8 | 57.7-148 | |
| HFPO-DA | 393 | 20 | " | 400.00 | 98.2 | 51.1-127 | |
| N-EtFOSAA | 553 | 10 | " | 400.00 | 138 | 47.2-185.3 | |
| N-MeFOSAA | 459 | 10 | " | 400.00 | 115 | 43.2-178 | |
| PFBA | 424 | 20 | " | 400.00 | 106 | 67.9-118 | |
| PFBS | 374 | 8.8 | " | 354.00 | 106 | 68.2-118 | |
| PFDA | 455 | 10 | " | 400.00 | 114 | 47.4-162 | |
| PFDoA | 434 | 10 | " | 400.00 | 108 | 56.5-155 | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics (SVOA) - Quality Control

US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch 2304003 - S PFC

LCS (2304003-BS1)

Prepared: 04/05/23 Analyzed: 04/06/23

| | | | | | | | | | | |
|---------|-----|-----|------|--------|--|-----|------------|--|--|--|
| PFDS | 419 | 9.6 | ng/L | 386.00 | | 108 | 35.1-168 | | | |
| PFHpA | 426 | 10 | " | 400.00 | | 107 | 72.8-116 | | | |
| PFHpS | 420 | 19 | " | 380.00 | | 110 | 59.7-130 | | | |
| PFHxA | 421 | 20 | " | 400.00 | | 105 | 62.6-127 | | | |
| PFHxS | 407 | 9.1 | " | 364.80 | | 112 | 69.5-117 | | | |
| PFNA | 448 | 10 | " | 400.00 | | 112 | 64.1-128.4 | | | |
| PFNS | 396 | 9.6 | " | 384.00 | | 103 | 63.3-126 | | | |
| PFOA | 431 | 10 | " | 400.00 | | 108 | 66.7-122 | | | |
| PFOS | 406 | 9.3 | " | 370.20 | | 110 | 70.4-122 | | | |
| PFPeA | 423 | 10 | " | 400.00 | | 106 | 72-115 | | | |
| PFPeS | 392 | 9.4 | " | 376.00 | | 104 | 69-117 | | | |
| PFTeDA | 463 | 20 | " | 400.00 | | 116 | 42.9-179 | | | |
| PFTTrDA | 421 | 10 | " | 400.00 | | 105 | 32.2-215 | | | |
| PFUdA | 448 | 10 | " | 400.00 | | 112 | 65.8-142 | | | |

Matrix Spike (2304003-MS1)

Source: E231202-07RE1

Prepared: 04/05/23 Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | | | | |
|-----------|-----|-----|------|--------|------|------|--------|--|--|------|
| 4:2FTS | 917 | 9.4 | ng/L | 375.50 | U | 244 | 70-133 | | | QM-2 |
| 6:2FTS | 450 | 9.5 | " | 381.53 | U | 118 | 58-143 | | | |
| 8:2FTS | 520 | 9.6 | " | 385.54 | U | 135 | 66-126 | | | QM-2 |
| FOSA | 415 | 10 | " | 401.61 | U | 103 | 61-138 | | | |
| HFPO-DA | 384 | 20 | " | 401.61 | U | 95.5 | 45-129 | | | |
| N-EtFOSAA | 537 | 10 | " | 401.61 | U | 134 | 50-168 | | | |
| N-MeFOSAA | 489 | 10 | " | 401.61 | U | 122 | 47-169 | | | |
| PFBA | 433 | 20 | " | 401.61 | 15.5 | 104 | 60-141 | | | |
| PFBS | 433 | 8.9 | " | 355.42 | 30.6 | 113 | 62-135 | | | |
| PFDA | 479 | 10 | " | 401.61 | U | 119 | 53-156 | | | |
| PFDoA | 460 | 10 | " | 401.61 | U | 115 | 30-172 | | | |
| PFDS | 407 | 9.7 | " | 387.55 | U | 105 | 44-151 | | | |
| PFHpA | 447 | 10 | " | 401.61 | 13.8 | 108 | 75-122 | | | |
| PFHpS | 422 | 19 | " | 381.53 | U | 111 | 66-132 | | | |
| PFHxA | 480 | 20 | " | 401.61 | 19.1 | 115 | 64-138 | | | |
| PFHxS | 397 | 9.1 | " | 366.26 | U | 108 | 72-124 | | | |
| PFNA | 499 | 10 | " | 401.61 | 45.1 | 113 | 72-129 | | | |
| PFNS | 394 | 9.6 | " | 385.54 | U | 102 | 61-126 | | | |
| PFOA | 465 | 10 | " | 401.61 | 19.3 | 111 | 74-127 | | | |
| PFOS | 473 | 9.3 | " | 371.69 | 55.7 | 112 | 68-132 | | | |
| PFPeA | 465 | 10 | " | 401.61 | 27.3 | 109 | 75-122 | | | |
| PFPeS | 416 | 9.4 | " | 377.51 | U | 110 | 72-122 | | | |
| PFTeDA | 494 | 20 | " | 401.61 | U | 123 | 10-194 | | | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics (SVOA) - Quality Control

US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|
|---------|--------|-----------------|-------|-------------|---------------|------|-------------|-----|-----------|-------|

Batch 2304003 - S PFC

Matrix Spike (2304003-MS1)

Source: E231202-07RE1

Prepared: 04/05/23

Analyzed: 04/06/23

| | | | | | | | | | | |
|--------|-----|----|------|--------|---|-----|--------|--|--|--|
| PFTrDA | 448 | 10 | ng/L | 401.61 | U | 111 | 10-193 | | | |
| PFUdA | 466 | 10 | " | 401.61 | U | 116 | 44-164 | | | |

Matrix Spike Dup (2304003-MSD1)

Source: E231202-07RE1

Prepared: 04/05/23

Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | | | | |
|-----------|-----|-----|------|--------|------|------|--------|--------|-----|------|
| 4:2FTS | 915 | 9.4 | ng/L | 374.00 | U | 245 | 70-133 | 0.198 | 34 | QM-2 |
| 6:2FTS | 476 | 9.5 | " | 380.00 | U | 125 | 58-143 | 5.54 | 45 | |
| 8:2FTS | 564 | 9.6 | " | 384.00 | U | 147 | 66-126 | 8.23 | 56 | QM-2 |
| FOSA | 435 | 10 | " | 400.00 | U | 109 | 61-138 | 4.78 | 39 | |
| HFPO-DA | 388 | 20 | " | 400.00 | U | 97.0 | 45-129 | 1.12 | 57 | |
| N-EtFOSAA | 561 | 10 | " | 400.00 | U | 140 | 50-168 | 4.36 | 53 | |
| N-MeFOSAA | 478 | 10 | " | 400.00 | U | 119 | 47-169 | 2.41 | 65 | |
| PFBA | 439 | 20 | " | 400.00 | 15.5 | 106 | 60-141 | 1.42 | 37 | |
| PFBS | 427 | 8.8 | " | 354.00 | 30.6 | 112 | 62-135 | 1.28 | 32 | |
| PFDA | 483 | 10 | " | 400.00 | U | 121 | 53-156 | 0.885 | 57 | |
| PFDoA | 482 | 10 | " | 400.00 | U | 121 | 30-172 | 4.62 | 56 | |
| PFDS | 421 | 9.6 | " | 386.00 | U | 109 | 44-151 | 3.26 | 66 | |
| PFHpA | 463 | 10 | " | 400.00 | 13.8 | 112 | 75-122 | 3.48 | 26 | |
| PFHpS | 424 | 19 | " | 380.00 | U | 111 | 66-132 | 0.405 | 28 | |
| PFHxA | 481 | 20 | " | 400.00 | 19.1 | 116 | 64-138 | 0.353 | 42 | |
| PFHxS | 429 | 9.1 | " | 364.80 | U | 117 | 72-124 | 7.62 | 32 | |
| PFNA | 511 | 10 | " | 400.00 | 45.1 | 117 | 72-129 | 2.51 | 31 | |
| PFNS | 400 | 9.6 | " | 384.00 | U | 104 | 61-126 | 1.67 | 35 | |
| PFOA | 465 | 10 | " | 400.00 | 19.3 | 111 | 74-127 | 0.0333 | 32 | |
| PFOS | 473 | 9.3 | " | 370.20 | 55.7 | 113 | 68-132 | 0.0322 | 37 | |
| PFPeA | 463 | 10 | " | 400.00 | 27.3 | 109 | 75-122 | 0.433 | 27 | |
| PFPeS | 398 | 9.4 | " | 376.00 | U | 106 | 72-122 | 4.60 | 29 | |
| PFTeDA | 571 | 20 | " | 400.00 | U | 143 | 10-194 | 14.4 | 111 | |
| PFTTrDA | 488 | 10 | " | 400.00 | U | 122 | 10-193 | 8.69 | 106 | |
| PFUdA | 476 | 10 | " | 400.00 | U | 119 | 44-164 | 2.19 | 48 | |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Semi Volatile Organics (SVOA) - Quality Control

US-EPA, Region 4, LSASD

| Analyte | Result | Reporting Limit | Units | Spike Level | Source Result | %REC | %REC Limits | RPD | RPD Limit | Notes |
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|
|---------|--------|--------------------|-------|----------------|------------------|------|----------------|-----|--------------|-------|

Batch 2304003 - S PFC

MRL Verification (2304003-PS1)

Prepared: 04/05/23 Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | | | | |
|-----------|------|-----|------|--------|--|------|----------|--|--|-------|
| 4:2FTS | 8.75 | 9.4 | ng/L | 9.3500 | | 93.6 | 47.1-145 | | | MRL-2 |
| 6:2FTS | 5.14 | 9.5 | " | 9.5000 | | 54.1 | 29.2-154 | | | MRL-2 |
| 8:2FTS | 8.65 | 9.6 | " | 9.6000 | | 90.2 | 36.4-156 | | | MRL-2 |
| FOSA | 9.47 | 10 | " | 10.000 | | 94.7 | 37.7-168 | | | MRL-2 |
| N-EtFOSAA | 9.31 | 10 | " | 10.000 | | 93.1 | 27.2-205 | | | MRL-2 |
| N-MeFOSAA | 7.96 | 10 | " | 10.000 | | 79.6 | 23.2-198 | | | MRL-2 |
| PFBS | 9.07 | 8.8 | " | 8.8500 | | 102 | 48.2-138 | | | MRL-2 |
| PFDA | 9.02 | 10 | " | 10.000 | | 90.2 | 27.4-182 | | | MRL-2 |
| PFDoA | 8.39 | 10 | " | 10.000 | | 83.9 | 36.5-175 | | | MRL-2 |
| PFDS | 9.98 | 9.6 | " | 9.6500 | | 103 | 15.1-188 | | | MRL-2 |
| PFHpA | 11.3 | 10 | " | 10.000 | | 113 | 52.8-136 | | | MRL-2 |
| PFHxS | 10.0 | 9.1 | " | 9.1200 | | 110 | 49.5-138 | | | MRL-2 |
| PFNA | 8.48 | 10 | " | 10.000 | | 84.8 | 44.1-148 | | | MRL-2 |
| PFNS | 9.82 | 9.6 | " | 9.6000 | | 102 | 43.3-146 | | | MRL-2 |
| PFOA | 11.0 | 10 | " | 10.000 | | 110 | 46.7-142 | | | MRL-2 |
| PFOS | 12.7 | 9.3 | " | 9.2550 | | 137 | 50.4-142 | | | MRL-2 |
| PFPeA | 12.1 | 10 | " | 10.000 | | 121 | 52-135 | | | MRL-2 |
| PFPeS | 9.38 | 9.4 | " | 9.4000 | | 99.8 | 49-137 | | | MRL-2 |
| PFTTrDA | 10.7 | 10 | " | 10.000 | | 107 | 12.2-235 | | | MRL-2 |
| PFUdA | 8.79 | 10 | " | 10.000 | | 87.9 | 45.8-162 | | | MRL-2 |

MRL Verification (2304003-PS2)

Prepared: 04/05/23 Analyzed: 04/06/23

ASTM D7979-19

| | | | | | | | | | | |
|---------|------|----|------|--------|--|------|----------|--|--|-------|
| HFPO-DA | 24.1 | 20 | ng/L | 20.000 | | 121 | 31.3-147 | | | MRL-2 |
| PFBA | 20.4 | 20 | " | 20.000 | | 102 | 47.9-138 | | | MRL-2 |
| PFHpS | 22.0 | 19 | " | 19.000 | | 116 | 39.7-150 | | | MRL-2 |
| PFHxA | 19.9 | 20 | " | 20.000 | | 99.7 | 42.6-147 | | | MRL-2 |
| PFTeDA | 18.4 | 20 | " | 20.000 | | 92.1 | 22.9-199 | | | MRL-2 |



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Region 4 Laboratory Services and Applied Science Division

980 College Station Road, Athens, Georgia 30605-2700

D.A.R.T. Id: 23-0151

Project: 23-0151, Sanford Cleaners - Reported by Floyd Wellborn

Notes and Definitions for QC Samples

| | |
|-------|--|
| U | The analyte was not detected at or above the reporting limit. |
| MRL-2 | MRL verification for Non-Potable Water matrix |
| QL-2 | Laboratory Control Spike Recovery greater than method control limits |
| QM-2 | Matrix Spike Recovery greater than method control limits |

End of Report